

CORRES. CONTROL

OUTGOING LTR. NO.

DOE ORDER # 4700.1

03-RF-01344

DIST.	LTR	ENC
DIETER, T.		
ERRERA, D.W.		
ERRI, M.S.		
INDSAY, D.		
YLE, J.		
MARTINEZ, L. A.		
PARKER, A.		
POWERS, K.		
SHELTON, D.C.		
SPEARS, M.S.		
RICE, K.D.		
TUOR, N. R.		

September 5, 2003

03-RF-01344

AGUILAR, P.		
ALBIN, C.		
ABLE, M.		
JEAN, C.		
BUTLER, J. L.		
DECK, C.		
FRANCIS, M.	X	X
REIBOTH, C.		
SEIS, A.		
GIBBS, F.	X	
HUMSTON, T.		
KNAPP, S.		
INSINIGLER, H.		
MYERS, K.		
NESTA, S.	X	X
OLIVER, R.		
OMAN, K.		
PLAPPERT, R.		
PRIMROSE, A.		
RICHARDELLA, R.		
ROSENMAN, A.	X	X
SNYDER, D.P.		
THOMPSON, J.		
VIEMELT, K.	X	X

Joe Legare
Assistant Manager for
Environment and Stewardship
DOE, RFFO

RSOP FOR COMPONENT REMOVAL, SIZE REDUCTION, AND DECONTAMINATION
ACTIVITIES NOTIFICATION LETTER FOR BUILDINGS 991 AND 998, AND RCRA
CLOSURE FOR UNITS 991.1 (B991) AND 984.1 (B984) – FEG-026-03

Attached is a draft transmittal letter to the Colorado Department of Public Health and
Environment for the RSOP notification for Buildings 991 and 998 component removal, size
reduction, and decontamination, and the Closure Description Document (CDD) for RCRA units
991.1 and 984.1. The draft transmittal letter has been prepared from DOE building point of
contact to CDPHE building point of contact; however, it could also be addressed from DOE
RFCA coordinator to CDPHE RFCA coordinator.

Please contact Steve Nesta x6386 with questions or concerns.

Frank E. Gibbs

Frank E. Gibbs
Deputy Project Manager
Remediation, Industrial D&D, and Site Services

Attachment:
As Stated

MF:pvt

Orig. and 1 cc – Joe Legare

cc: Steve Tower

CORRES. CONTROL	X	X
ADMIN RECD/T130G	X	X
TRAFFIC		
ATS/130		

CLASSIFICATION:

JCNI		
UNCLASSIFIED		
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER

SIGNATURE
DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
Date CLASSIFICATION OFFICE
IN REPLY TO RFP CC NO.:

ACTION ITEM STATUS:
☐ PARTIAL/OPEN
☐ CLOSED
LTR APPROVALS:

ORIG. & TYPIST INITIALS:
MF:pvt



SEP 2003
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IA-A-001617

David Kruchek
Colorado Department of Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80222-1530

**RSOP FOR COMPONENT REMOVAL, SIZE REDUCTION, AND DECONTAMINATION
ACTIVITIES NOTIFICATION LETTER FOR BUILDINGS 991 AND 998, AND RCRA CLOSURE
FOR UNITS 991.1 (B991) AND 984.1 (B984).**

Mr. Kruchek:

In accordance with the Rocky Flats Cleanup Agreement Standard Operating Protocol (RSOP) for Component Removal, Size Reduction and Decontamination Activities, this letter and its attachments is notification for RSOP implementation. This notification is for all activities required to bring Buildings 991 and 998 to the unrestricted release criteria. This will involve component removal, size reduction, decontamination, and RCRA unit closure activities utilizing the methods specified in the RSOP. Included, as an attachment, is the Closure Description Document (CDD) for the RCRA units in Buildings 991 and 984. These are Units 991.1 and 984.1, respectively.

Once the pre-demolition survey is complete, and the facilities meet the unrestricted release criteria, an additional notification letter will be prepared to implement the RSOP for Facility Disposition.

This work will be conducted by Kaiser-Hill or a decommissioning subcontractor. If Kaiser-Hill or the subcontractor proposes to use alternate methods, an additional notification will be made and, in consultation with DOE/LRA, the RFCA process for decision document modification will be used.

The appropriate checklists and information required by the RSOP are attached to this letter and should provide the necessary information. This work will be conducted in accordance with the work control documentation prepared by Kaiser-Hill or the subcontractor. The exact methods and process selected by Kaiser-Hill or the subcontractor and progress of the activities will be communicated to DOE/LRA through the consultative process, particularly the monthly RISS production meetings.

Because RCRA closure is being conducted, the LRA has 30 days to review the RSOP notification letter and provide feedback, including a definitive reason for not proceeding with the project. If no feedback is received within 30 days, the project will proceed as planned.

If you have any questions regarding this, please contact me at (303) 966-2133.

Steve Tower
U.S. Department of Energy

RSOP for Component Removal, Size Reduction, and Decontamination Activities Checklist

Project scope: Buildings 991 and 998 component removal, decontamination, size reduction, and RCRA closure of Units 991.1 and 984.1			
Facility description: Buildings 991 (Site Material Receiving and Shipping), 998 (Storage vault) and 984 (TRU Waste Storage)			
Description of planned activity(ies): Remove components, decontaminate Be in 991 basement and rad area in Corridor B of B991 prior to demolition. Close RCRA Units 991.1 and 984.1			
Facility/rooms/sets/areas involved: All areas of Buildings 991, 998 and 984			
Is RCRA unit closure(s) part of the planned activity? Unit 991.1; CDD includes 984.1 (B984)			<input checked="" type="checkbox"/> Yes
If RCRA units are included, attach unit specific information sheets and drawings			<input type="checkbox"/> No
Attach checklists from Appendix A of the RSOP.		<input checked="" type="checkbox"/>	Component Removal/Size Reduction
		<input checked="" type="checkbox"/>	Decontamination
RLCR Status	<input checked="" type="checkbox"/>	RLCR complete and concurrence received: 03/21/03	
	<input type="checkbox"/>	RLCR initiated but incomplete; concurrence anticipated:	
	<input type="checkbox"/>	RLC has not been initiated¹ and is scheduled for initiation on:	
If RLCR is not complete or initiated, what data will be used to plan the work activities?			
Activity requires modification to the ARARs listed in the RSOP.			<input type="checkbox"/> Yes, attach to letter
			<input checked="" type="checkbox"/> No
Attach Administrative Record file requirements for the activity.			
Point of contact for each facility/activity: Karen Wiemelt – (303) 966-9883			
Duration of work activities: 2 months		Anticipated work start: 10/01/03	
Attach schedule for each facility or activity for information purposes.			
Does the activity involve removing contaminated portions of the building shell.			<input type="checkbox"/> Yes, LRA consultation and concurrence required
			<input checked="" type="checkbox"/> No

¹ Evaluate using DPP, Sections 1.1.4 and 1.1.5 and the consultative process to implement activities

RSOP for Component Removal, Size Reduction, and Decontamination Activities Checklist

Are there deviations/exceptions to the RSOP for the proposed activity(ies)?										<input type="checkbox"/> <input checked="" type="checkbox"/>	Yes No
Provide an explanation of deviation/exception to the RSOP: Not applicable C. Check the appropriate resulting action box below											
Additional RFCA decision document required (PAM – IM/IRA)											
Major modification to RSOP						Field change to RSOP					
Minor modification to RSOP						LRA consultation					
Activity(ies) will result in the following waste types										<input type="checkbox"/> <input checked="" type="checkbox"/>	Process waste Remediation waste
TRU	✓	LLW		LLMW	✓	Haz.	✓	Sanitary	✓	Other: recyclable/re-use	
LRA Notification Review Time						14 days, no RCRA unit closure involved					
						<input checked="" type="checkbox"/> 30 days, RCRA unit closure involved					

**FACILITY COMPONENT REMOVAL, SIZE REDUCTION, AND DECONTAMINATION
ACTIVITY CHECKLIST**

Building: Buildings 991 and 998

Closure Project Manager: Karen Wiemelt

COMPONENT REMOVAL/SIZE REDUCTION

Component Type	✓
Gloveboxes	
Tanks and ancillary equipment (located both inside and outside the facility)	✓
Fume hoods	✓
Ventilation/filtration systems (both inside and outside the facility)	✓
Utilities and other equipment (both inside and outside the facility; including electrical, steam, and fire suppression systems)	✓
Walls	✓
Floors	✓
Ceilings	✓
Roofs	
Other structural members	
Other*	

Removal/Size Reduction Technique	✓
Small tools	✓
Paving breaker, jackhammer and/or similar tools used to break up concrete	
Excavators, such as backhoes, to excavate underground components, such as tanks and ancillary equipment	
Hoists and cranes	
Plasma arc cutter	
Diamond wire saw	
Wachs cutter	
Laser cutter	
Oxy-torch cutter	
Hydraulic shears	
Shear baler	
Water cutter using abrasives	
Arc air slice	
Arbor press	
Non-explosive cracking agent	
Other *	

* Describe "Other" Component Type(s) and/or Removal/Size Reduction Technique(s):

DECONTAMINATION

Component Type	✓
Gloveboxes	
Tanks and ancillary equipment (located both inside and outside the facility)	✓
Fume hoods	✓
Ventilation/filtration systems (both inside and outside the facility)	✓
Utilities and other equipment (both inside and outside the facility; including electrical, steam, and fire suppression systems)	✓
Walls	
Floors	✓
Ceilings	✓
Roofs	
Other structural members	
Other*	

Decontamination Technique	✓
Wiping/scrubbing/washing with water or detergents	✓
Vacuuming	✓
Strippable Coating	✓
Grinding	
Scarifying	
Scabbling	
Paving breaker/chipping hammer	
Spalling	
Abrasive/grit blasting	
CO ₂ blasting	
Hydrolasing	
Strong mineral acids	
Organic or weak acids	
Additional oxidants, such as cerium and other similar metals	
Other *	✓

* Describe "Other" Component(s) and/or Decontamination Technique(s):

The rad contamination in Corridor B is in the paint. This paint may be removed by chipping with small tools

Note: In the event a planned activity falls outside the scope of this RSOP, the closure project manager will consult with DOE and the LRA to determine whether this RSOP should be modified to include the activity, or whether a separate decision document should be written.

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




Administrative Record Requirements for this Activity

- Final Rocky Flats Cleanup Agreement (RFCA)
- RFETS Decommissioning Program Plan (DPP)
- RFCA Standard Operating Protocol for Component Removal, Size Reduction, and Decontamination Activities
- Reconnaissance Level Characterization Report for Group Area 2 Group 2 Facilities
- Notification Letter and subsequent CDPHE correspondence, if appropriate

Rocky Flats Environmental Technology Site Permitted RCRA Units

EXPLANATION

Standard Map Features

-  Buildings and other structures
-  Soler vegetation ponds
-  Fences and other barriers
-  Paved roads
-  Ditch roads

NOTE

Contaminant Storage

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**Closure Description Document for the
Closure of RCRA Units 991.1
The Mixed Waste Storage Unit at Building 991, and 984.1 The
TRU Waste Storage Facility at Building 984**

INTRODUCTION

The Rocky Flats Environmental Technology Site's (RFETS) "RFCA Standard Operating Protocol (RSOP) for Facility Component Removal, Size Reduction, and Decontamination Activities, Section 5.0, Revision 0, February 4, 2001" addresses closure of RCRA regulated units.

This document applies to RCRA Units 991.1 and 984.1. Unit 991.1 includes numerous hazardous and mixed waste storage rooms located in Buildings 991 and 998. Unit 984.1 refers to the Transuranic (TRU) Waste Storage Facility at Building 984. Complete closure will be accomplished in accordance with Option 1 of the closure options outlined in the RSOP (Sections 5.1.1 – 5.1.3).

Activities will be designed to achieve the closure performance standard, protect human health and the environment, and minimize waste. Specific work instructions, with engineering, health and safety, and waste management information, will be developed prior to the start of closure activities. These instructions will be developed in accordance with applicable RFETS policies and procedures.

SYSTEM HISTORY AND WASTE CHARACTERIZATION

RCRA Unit 991.1 within the 991 and 998 facilities is located near the eastern edge of the RFETS industrial area. The past history within these facilities included final assembly areas for plutonium, enriched uranium, depleted uranium and beryllium weapons components. These components were stored within the 991 facility cluster prior to offsite shipment. Unit 991.1 is a relatively new permitted waste storage unit. The first drum of waste to be stored in the unit was placed there on September 6, 2000. Since then, the facility has served as a TRU waste storage facility. The EPA hazardous waste codes that apply to Unit 991.1 include D001 - D011, D018 - D019, D022, D028 – D029, D034 – D035, D038 – D040, D043, F001–F003, F005 - F009. See Attachment 1, Unit Specific Information – Unit 991.1, from the RFETS RCRA permit.

The permitted storage capacity (maximum) of Unit 991.1 is 50,655 gallons. Liquids are permitted to a 973 gallon maximum.

RCRA Unit 984.1 within Building 984 is also located near the eastern edge of the RFETS industrial area, adjacent to B991. This unit was put into service in September 2000, and inactivated in May 2003. The EPA hazardous waste codes that apply to Unit 984.1 include D001 - D011, D018 - D019, D022, D028 – D029, D034 – D035, D038 – D040, D043, F001–F003, F005 - F009. See Attachment 2, Unit Specific Information– Unit 984.1, from the RFETS RCRA permit.

The permitted storage capacity (maximum) of Unit 984.1 is 217,604 gallons. Liquids are permitted to a 330 gallon maximum.

System Boundaries

Unit 991.1 is specific to the following Rooms within Building 991: 101, 105, 106, 107, 108, 110, 110A, 110B, 111, 111A, 112, 113, 114, 115, 116, 118, 119, 120, 122, 122A,

122B, 123, 124, 127, 128, 129, 132, 134, 135, 136, 137, 138, 140, 140A, 141, 142, 142A, 142B, 143, 147, 147A, 148, 149, 150, 151, 153, 155, 156, 157, 158, 166, 167 and 170; and within Building 998: Room 300 and Corridor A. See Attachment 1, Unit Specific Information – Unit 991.1, from the RFETS RCRA permit.

Unit 984.1 is specific to the interior of B984. See Attachment 2, Unit Specific Information – Unit 984.1, from the RFETS RCRA permit.

CLOSURE OPTIONS

Units 991.1 and 984.1 – All Permitted Waste Storage Rooms in Buildings 991, 998, and 984

A review of the RCRA Operating Record including weekly inspection logs, ECATS, PATS, and the Spill Occurrence Report, indicates that no hazardous, TRU or TRU-mixed waste has spilled, leaked or otherwise been released from Units 991.1 or 984.1. A visual inspection of the permitted storage rooms by RISS Environmental compliance personnel verified the absence of hazardous or mixed waste stains and/or residuals. The observed stains in 991.1 can be attributed to rain/snow melt. Additionally, there is no record of liquid wastes being stored in Unit 984.1. Therefore, Units 991.1 and 984.1 will be closed in accordance with Section 5.1.1 of the “*RSOP for Facility Component Removal, Size Reduction, & Decontamination Activities*”, Option 1. Option 1 requires that two criteria be met, a review of the Operating record to document spills or releases were adequately cleaned up, and a visual inspection to verify the absence of stains and/or residuals.

SOIL CONTAMINATION EVALUATION AND POST CLOSURE CARE

The Historical Release Report indicates that soil contamination may exist underneath B991 as detailed in the Under Building Contamination (UBC) 991 description. Soil sampling is not planned for activities conducted under this RSOP notification. ER will perform any necessary soil sampling and associated soil remediation upon invoking the *ER RSOP for Routine Soil Remediation*.

RECORDKEEPING

RCRA unit closure activities will be documented in the Decommissioning Final Closeout Report as opposed to the Pre-Demolition Survey Report (PDSR) which will be completed after demolition of the units. When final closure of units 991.1 and 984.1 are completed, the Site's Master List of RCRA units will be updated with the closure status and a permit modification will be submitted to remove the units from the RCRA Part A and Part B Permit. All inspection records will be sent to permanent storage.

ATTACHMENT 1

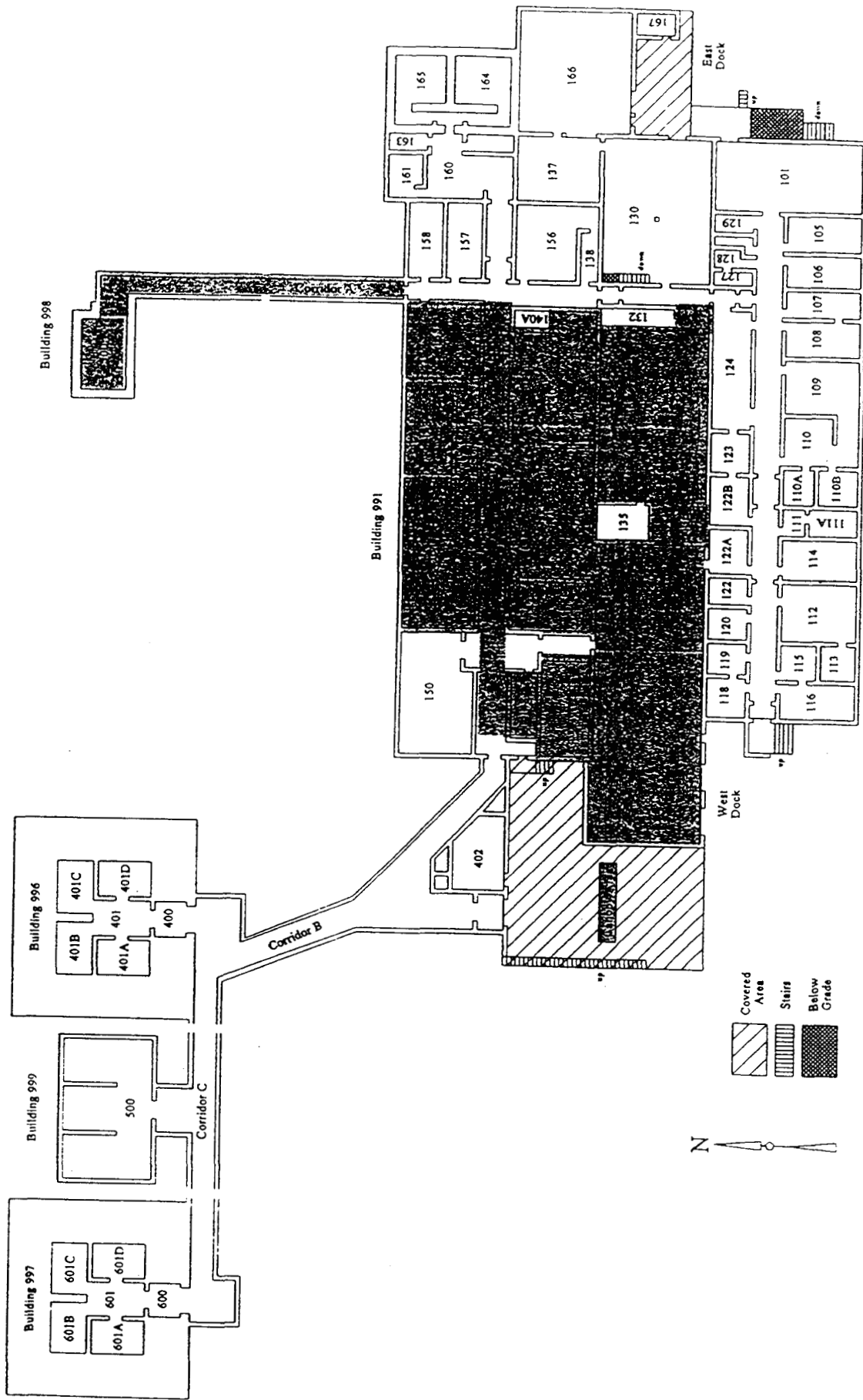
Unit Specific Information

Unit 991.1

12

Unit Number: 991.1
Unit Name: Container Staging and Storage Area (Building 991)
Process Code: S01
Design Capacity: Maximum Capacity: 50,655 gallons
Liquid Capacity Limit: 973 gallons
Waste Type(s): TRU Mixed
Process Total Number of Units: 1
EPA Hazardous Waste Codes: D001-D011, D018-D019, D022, D028-D029, D034-035, D038-D040,
D043, F001-F003, F005-F009
Estimated Annual Quantity of Waste: 500 Tons
Unit Permitting

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Permitted Hazardous Waste Storage Areas

Unit 991.1
Buildings 991/998

February 28, 2003

III-30

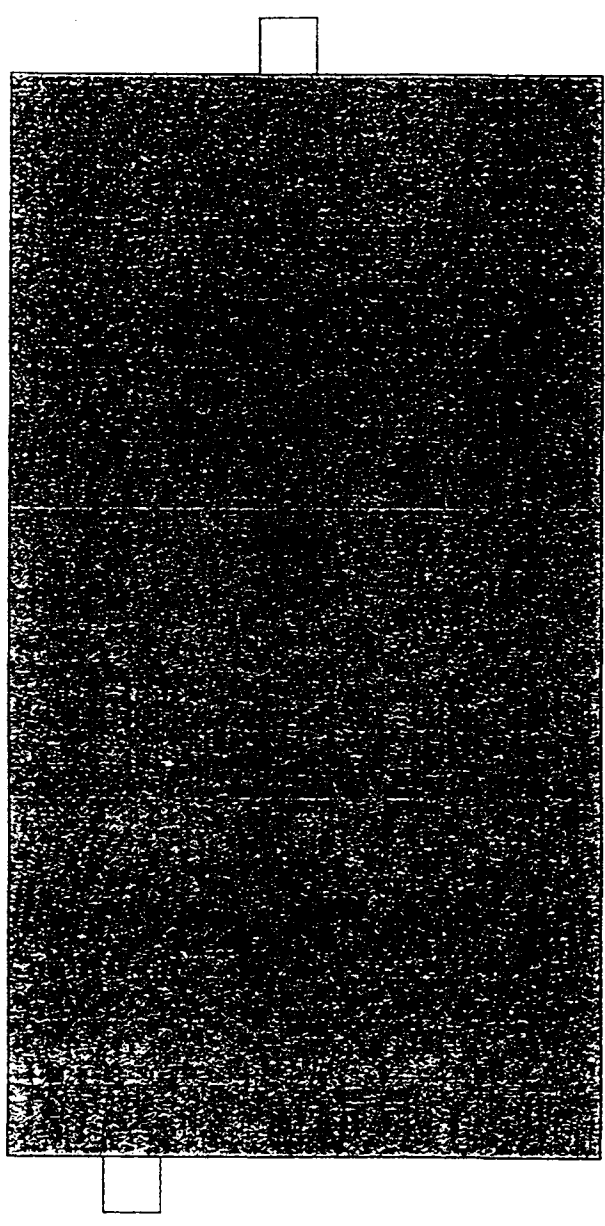
ATTACHMENT 2

Unit Specific Information

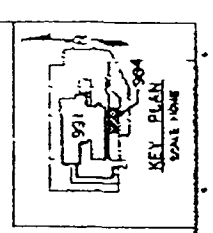
Unit 984.1

Unit Number: 984.1
Unit Name: Container Staging and Storage Area (Building 984)
Process Code: S01
Design Capacity: Maximum Capacity: 217,604 gallons (1,077 cubic yards)
Liquid Capacity Limit: 330 gallons
Waste Type(s): Low-Level Mixed, TRU Mixed
Process Total Number of Units: 1
EPA Hazardous Waste Codes: D001-D011, D018-D019, D022, D028-D029, D034-D035, D038-D040, D043, F001-F003, F005-F009
Estimated Annual Quantity of Waste: 3,800 Tons
Unit Permitting Status: Permitted

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■ Permitted Hazardous/Mixed Waste
Storage Areas



Unit MS 001, Sub-Unit 984.1
Building 984